

A New *Opisodasys* from Idaho (Siphonaptera: Dolichopsyllidae).

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The following new species of *Opisodasys* Jordan (1933, p. 72) is named in honor of Dr. W. L. Jellison, who has recently (1939) redescribed the other known species of the genus. In that paper and in another recently published by Jordan (1939, p. 316), the male of *O. robustus* (Jordan) is described, and is shown to be the same as that of *O. spatiosus* I. Fox (1940, p. 65). Hence the latter name falls as a synonym of *O. robustus*.

Through the courtesy of the authorities of the United States National Museum, the writer has had the opportunity to study the collections in their charge which include determined specimens of *O. enoplus* (Rothschild) and *O. robustus*, and type material of the following species: *O. pseudarctomys* (Baker), male and female; *O. keeni* (Baker), male and two females; and *O. vesperalis* (Jordan), male and female. Since specimens of all the known species of the genus have been available for study, it has been possible to devise a key to aid in the determination of the males. The type species of the genus is *Ceratophyllus vesperalis* Jordan (1929, p. 28), by original designation.

KEY TO THE SPECIES OF *OPISODASYS* JORDAN (MALES ONLY).

1. Sternal plate VIII broad basally, truncate distally,

O. jellisoni, n. sp.

 Sternal plate VIII narrow basally, not truncate distally..2
2. Process of clasper bifurcate3
 Process of clasper not bifurcate.....4
3. Lobes of process of clasper subequal....*O. pseudarctomys*
 Posterior lobe of process much shorter than anterior,

O. vesperalis
4. Uppermost spiniform bristle of movable finger elbowed near
 base, not straight, apex directed upward..*O. robustus*
 Uppermost spiniform bristle of movable finger not elbowed,
 straight or with apex directed downward.....5
5. Sternal plate VIII with an apical bristle.....*O. keeni*
 Sternal plate VIII without an apical bristle....*O. enoplus*

Opisodasys jellisoni, n. sp. (Figs. 1, 2, 3.).

♂. Preantennal region of head with two rows of bristles; upper row consisting of seven bristles, lower row of three much longer ones. Post-antennal region with three bristles, in addition to a marginal row of five. Labial palpus almost reaching to apex of fore coxa, acuminate distally. Pronotal comb consisting of about 21 spines. Mesopleural suture with one bristle, mesepimeron with three bristles. Supraepisternum with one bristle, infraepisternum with three bristles; metepimeron with two bristles. *Modified segments*.—Movable finger, process of clasper and sternal plate VIII as shown in Fig. 1. Penis long and slender, spring short not completing a turn.

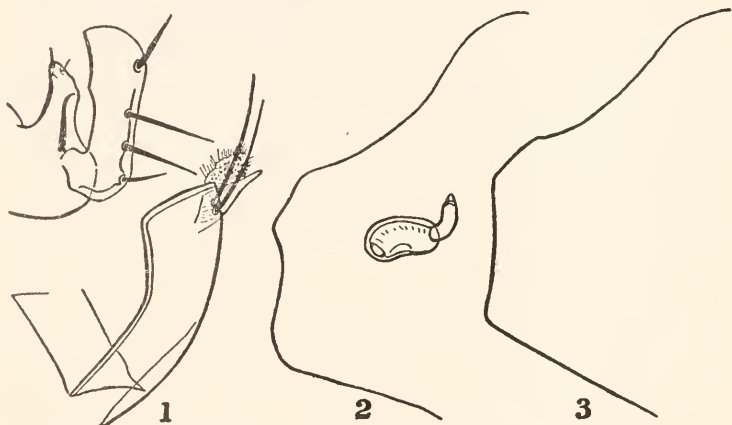


Fig. 1. *Opisodasys jellisoni*, n. sp., process of clasper, movable finger and sternal plate VIII of male.

Fig. 2. *Idem*. receptaculum seminis and sternal plate VII of female allotype.

Fig. 3. *Idem*, sternal plate VII of female paratype.

♀. Chaetotaxy of head and thorax not well shown by specimens available. Bristles of upper preantennal row reduced, some of them absent. Labial palpus not acuminate distally. Mesepisternum and mesepimeron each with four bristles. Supraepisternum with one bristle; metepimeron with three bristles. Sternal plate VII showing variation in depth of sinus. In the holotype the sternal plate VII has the shape shown in Fig. 2; while in a paratype it has the shape shown in Fig. 3.

Type host and type locality.—Flying squirrel, *Glaucomys sabrinus bangsi* at Deer Park, Boise, Idaho.

Type material.—Male holotype and female allotype from *Glaucomys sabrinus bangsi* at Deer Park, Boise, IDAHO, collected December 15-18, 1939, by W. H. Marshall; in the United States National Museum. *Type*.—U. S. N. M. Cat. No. 54259. Male and female paratypes bearing the same data in the Author's private collection.

LITERATURE CITED.

FOX, IRVING. 1940. Notes on North American Dolichosyllid Siphonaptera, Wash. Ent. Soc. Proc. 42: 64-68, illus.

JELLISON, WILLIAM L. 1939. *Opisodasys* Jordan 1933, a genus of Siphonaptera. Jour. Parasitol. 25: 413-420, illus.

JORDAN, KARL. 1929. Notes on North American fleas. Novitates Zool. 35: 28-39, illus.

Id. 1933. A survey of the classification of the American species of *Ceratophyllus s. lat.* Novitates Zool. 39: 70-79.

Id. 1939. On some Nearctic Siphonaptera. Novitates Zool. 41: 316-320, illus.

Modification of the Behavior of Dragonfly Nymphs with Excised Labia (Odonata).

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About fifteen years ago certain experiments carried on with the nymphs of *Anax* and *Aeschna* established the fact that those insects are capable of modifying their activities to the extent that they will learn to come to the experimenter for food.

Recently it occurred to me that it might be of interest to perform similar experiments, using instead of normal specimens, those from which the labia had been removed. Unfortunately the relatively active Aeschnids were not obtainable, and it was necessary to use the more sluggish Gomphids and Libellulids instead. Yet, even with these, the results of the experiments exceeded expectations.

Each of eleven specimens was treated in the following manner: a looped thread was slipped over the labium until it reached the point where the organ was attached to the head; the thread was drawn tight, ligating the labium proximally;